EIGHTH ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

COMBINED RURAL AND THE URBAN

SANITARY AUTHORITIES

OF THE

CITY AND COUNTY OF HEREFORD,

1881.

By H. VAVASOUR SANDFORD, M.D., &c.

HEREFORD
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TO THE URBAN SANITARY AUTHORITY OF THE CITY OF HEREFORD AND THE COMBINED RURAL SANITARY AUTHORITIES OF THE SAME COUNTY.

EIGHTH ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

(Pursuant to the Regulations of the Local Government Board.)

THE URBAN SANITARY AUTHORITY OF THE CITY OF HEREFORD.

Population (Census 1881*)* 19,822.
Area in Acres 2,417.
Houses 3,912.
Aggregate number of people to a house 5.
Parishes 6.

December 31, 1881.

MR. MAYOR AND GENTLEMEN,

Since the last Annual Report was presented to you, a new order, dated March, 1880, has been issued by the Local Government Board, and by the 18th article, section 14 of that order, it is prescribed that the Medical Officer of Health shall "prepare an "annual report, to be made to the end of December in each year, "comprising a summary of the action taken during the year for "preventing the spread of disease, and an account of the Sanitary "state of his district generally at the end of the year. The report "shall also contain an account of the inquiries which he has made "as to conditions injurious to health existing in his district, and of "the proceedings in which he has taken part or advised under the "Public Health Act, 1875, so far as such proceedings relate to those "conditions; and also an account of the supervision exercised by "him, or on his advice, for Sanitary purposes over places and houses "that the Sanitary Authority have power to regulate, with the "nature and results of any proceedings which may have been so

"required and taken in respect of the same during the year. It "shall also record the action taken by him or on his advice, during "the year, in regard to offensive trades, and to factories and work-"shops. The report shall also contain tabular statements (on forms "to be supplied by the Local Government Board, or to the like "effect), of the sickness and mortality within the district, classified "according to diseases, ages, and localities."

The report I now have the honour to place before you is made in compliance with the above quoted order, and is of necessity somewhat lengthy.

It will, I think, be convenient, and conduce to uniformity, to adhere to the plan I have hitherto adopted in these annual reports, and the reports is therefore commenced with the usual formal record of the births and deaths occurring in the city for the past twelve months.

During the year 1881 the number of deaths registered for the whole of the city was 307; this is inclusive of the 19 in the Infirmary and 31 in the Workhouse, and calculated on a population of 19,822 (Census, 1881), will give a rate of mortality of 15·4 per 1,000, THE LOWEST ON RECORD.

The Births numbered 532, giving a birth-rate of 26·8 per 1,000.

With reference to sex 279 were males, and 253 females.

Of this 532 Births, 40 were illegitimate—the position in life of the mother being registered chiefly as "domestic servant.' *Three* less than reported last year.

The following table epitomises the ages at which the deaths occurred throughout the city :—

Deaths in the City, including Infirmary and Workhouse, from January 1st to December 31st, 1881.

Deaths under 1 year of age							61	93 under 5 years.
,, over 1 ,, and under 5 years							32	
,, ,, 5 ,, ,, 15 ,,							14	214 over 5 years.
,, ,, 15 ,, ,, 25 ,,							35	
,, ,, 25 ,, ,, 60 ,,							45	
,, ,, 60 ,,							120	
Total at all ages							307	

The grouping into various ages in the above Table is in accordance with the ages fixed in the tables furnished by the Local Government Board, which are duly filled in, and accompany this report.

Table showing the number of Deaths in each year for the last seven years ending 1881, from the eight chief zymotic diseases

including those in Workhouse, Infirmary, and the whole of the City :—

The Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Smallpox	—	—	—	—	—	—	—
Measles	1	12	6	8	5	1	—
Scarlet Fever	7	75	11	4	—	5	13
Diphtheria	1	—	—	4	4	1	2
Whooping Cough	3	12	2	7	27	1	—
Typhus Fever	2	—	—	—	—	—	—
Enteric Typhoid and Continued Fevers	3	2	—	—	2	—	2
Diarrhœa and Dysentery ...	8	9	5	15	5	28	4
	25	110	24	38	43	36	21

On perusing this Table, it will be at once made manifest, that a *slow* but *sure stamping out* of *zymotic disease* is annually taking place within this city, and, what is more gratifying still, *is* the following annual (and persistent) decrease in the rate of mortality from all causes, for the last seven years, as shown by the following Table :—

Table showing total number of Deaths from all causes in the seven years ending Dec. 31, 1881, within the City of Hereford, including those in the Infirmary and Workhouse.	1875	1876	1877	1878	1879	1880	1881
	401	447	342	335	456	352	307
Rate per 1,000	21·8	28·8	18·0	17·6	23·8	18·3	15·4

Thus proving by perpetually working the Public Health Act, 1875, the 21 cases of zymotic disease before recorded, may and undoubtedly will eventually be abolished.

From this Table let me draw your attention to one of more *importance* still—that of the number of Deaths of Infants and those under five years of age, and the gradual but *sure annual* decrease for the last seven years of the rate of Infantile mortality, as proved by the annexed .—

Table showing Deaths of Infants and those under 5 years from all causes, for the seven years ending Dec. 31, 1881, in the City of Hereford, including those in the Infirmary and Workhouse.	1875	1876	1877	1878	1879	1880	1881
	119	160	85	100	158	141	93
Rate per 1,000	6·0	8·3	4·1	5·0	8·0	7·0	4·7

It would be impossible to find a town with close upon 20,000 population that has responded so well to the Public Health Act as this city, and by reading the rapidly increasing population table *of Births* for the last seven years fully bears out what I prognosticated five years ago, with Divine help "*I will guarantee*

before six years that your city shall rank as one of the most healthy in the United Kingdom." Are not my endeavours crowned with success? You cannot get over these *tables of proof*, being verified by the ones furnished by the Local Government Board, London, which I append ;—

Table showing number of Births for the last seven years, ending Dec. 31, 1881, in the City of Hereford, including those in the Infirmary and Workhouse.	1875	1876	1877	1878	1879	1880	1881
	400	416	386	480	555	553	532

I beg to submit with this report the tables furnished by the Local Government Board. These tables are not quite similar to those formerly supplied. The first or table A deals entirely with the mortality of the district, divided into localities and showing the deaths in detail for each separate disease classed over and under five years. Table B deals only with cases of sickness. For table A I can claim accuracy, but for table B I fear the results are less reliable, due to difficulties in the way of obtaining exact information.

On analyzing these tables of sickness and deaths and the cause thereof, I will take first

Smallpox.—One case showed in your city by a tramp coming from Kent through London on Whit Monday. He was seen walking about your streets covered with this loathsome disease. By timely information being given me, I at once caused him to be taken to a tool house or shed built in the Workhouse gardens which had (some years back) been fitted up for the temporary reception of such cases. The result was complete recovery, without a single case from the infection following. I have only to add upon this case the isolation and disinfection were of the most rigid character, and further that the vaccination marks on the arms of the man were not sufficient for protection, there being only one true cicatrix visible.

Measles.—There have been a few cases in the city, and about 31 in the workhouse, but no death therefrom.

Scarlet Fever.—This year we have been again visited with an epedemic causing 13 deaths—eleven under 5 years of age and two above, out of a total altogether of about 200 cases for the year. Two-thirds of this number swarmed all over the city, from the Bishop's Palace to the most miserable hut, mainly in the months of July to December. The cases and type of dozens, not requiring medical assistance, were the means of propagating it amongst those where sanitation was very deficient. These sanitary shortcomings were the means of converting the mildness of the type of disease to that of a more malignant and fatal kind where death resulted. Isolation and disinfection being thoroughly insisted upon, I am pleased to say your city is now comparatively free

TABLE A.

TABLE of DEATHS during the year 1881 in the Three Divisions of the Urban Sanitary Authority of the City of Hereford, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all Ages.	Registered Births	Mortality from all causes, at subjoined Ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																				
																	Continued fevers.													
	Census 1881.		At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards		Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough	Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
City of Hereford (including Out-door Paupers)	19822	509	257	59	30	11	29	34	94	under 5	...	...	11	2	..	...	...	...	...	4	...	...	...	...	...	...	...	20	1	...	51
										5 upds.	...	...	2	...	...	...	...	2	...	.	...	1	1	...	1	...	24	37	26	1	73
Workhouse Infirmary	...	23	31	2	2	...	1	3	23	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	...	...	3
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	7	2	...	17
Infirmary	...	...	19	...	...	3	5	8	3	under 5	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
										5 upds.	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5	3	...	10
Totals	19822	532	307	61	32	14	35	45	120	under 5	...	...	11	2	...	...	...	...	...	4	...	...	...	...	...	...	1	20	1	...	54
										5 upds.	...	...	2	...	...	...	...	2	...	...	...	1	1	...	1	..	26	49	31	1	100

TABLE B.

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Three Divisions of the Urban Sanitary District of the City of Hereford; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING TO this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

176 in Workhouse and Workhouse Infirmary.

240 among Out-door Paupers.

556 as In-patients of Infirmary.

2790 as Out-patients ditto.

4137 as Out-patients of Hereford Dispensary.
(For 12 months ending June, 1881.)

200 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT, DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.																
								Continued Fevers.										
1	11	Smallpox. 12	Measles. 13	Scarlatina. 14	Diphtheria. 15	Croup (not "spasmodic") 16	Whooping Cough. 17	Typhus. 18	Enteric or Typhoid. 19	Other or Doubtful. 20	Diarrhœa and Dysentery. 21	Cholera. 22	Rheumatic Fever 23	Erysipelas. 24	Pyæmia. 25	Puerperal Fever. 26	Ague. 27	Other Diseases such as Chicken Pox. or Pneumonia, which the Medical Officer thinks well to record.
City of Hereford																		
Out-Paupers	under 5	...	2	3	...	...	...	...	...	...	11	...	...	...	...	...	...	10
	5 upds.	...	3	10	..	...	...	...	...	...	7	...	3	3	...	...	...	30
Workhouse Infirmary	under 5	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	..	2
	5 upds.	1	23	...	...	...	...	...	...	...	2	...	...	1	...	...	...	3
Infirmary	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
	5 upds.	...	...	...	...	...	...	...	...	...	3	...	7	...	1	...	...	...
Private Practice . .	under 5	...	1	100	2	...	...	...	...	...	5	...	...	...	...	...	...	...
	5 upds.	...	7	70	6	...	3	...	2	2	7	...	3	3	1	2	...	...
Totals ...	under 5	...	11	103	2	...	...	...	...	...	16	...	...	...	...	...	...	12
	5 upds.	1	33	80	6	...	3	...	2	2	19	...	13	7	2	2	..	33

from this fever to the date of this report. I would observe that I found it necessary to advise the closing of three of the public schools for a time, in order to have them disinfected by lime washing, the free use of carbolic soap, and other remedies. Nothing further could be done to stamp out the disease, there being no hospital for reception of infected people. This want of hospital accommodation I consider one of the greatest deficiencies in the city. It is a question of the greatest importance, and absolutely a Sanitary deficiency, that very few towns with 20,000 population are now subjected to. This deficiency has been severely felt by many good families, whose domestics and others have been attacked with the fever, who would have gladly paid any reasonable sum to have had such people sent to such a place. For years I have strongly advocated the desirability of some sort of place or small house being taken for such an hospital, but as yet all to no purpose. One question I would put to this Sanitary Authority, what would they have done if the single imported case of small-pox I just now related had spread? *It is too serious to think of.*

For full particulars of this epidemic, scarlet fever, I beg to refer my readers to my September quarterly report to the Mayor and Town Council hereto attached, marked No. 3.

The next disease mentioned by the Local Government Board's order for me to give an account of is—

Diphtheria from which two deaths are pointed out in Table A on the Mortality Tables, and six in Table B of the Sickness Table. Four of these cases occurred in one family, killing two children, the cause being undoubtedly proved (at a coroner's inquest held on one of the bodies) to be from sewage gas passing direct from the main sewer into and through a large hole in the pan of W.C. which this family had to use. The state of this house on my having the sewers and their attachments excavated, together with (and especially) the two adjoining houses, were something awful. An account of these cases will be found in my quarterly report for March 31, to the Mayor and Council, hereto attached, marked No. 1. The other two cases were of a sporadic character, very mild type, and due to no local insanitation.

Next in rotation in these Government Tables comes—

Typhoid and Enteric Fever.—Two deaths are recorded as emanating therefrom. One, as you will perceive from my quarterly report for Dec. 31, to the Mayor and Town Council, marked No. 4, was imported direct from Wales to this city, the man dying seven days after his arrival here. The other case was of very a doubtful type, the man having been bedridden for months from another malady. From these two cases come the two cases of sickness on Table B.

Continued Fevers.—One occurred to a girl of phthisical ten-

dency; the other a very slight case, and coupled with other disease from which she has recovered.

Diarrhœa and Dysentery.—These follow on the Mortality Table, from which four deaths are recorded, three of which were to infants under 1 year, and the other 5 years of age. From these four deaths I go now to Table B again (the Sickness Table) most of such cases being traced to the too free use of unripe and rotten fruit, with the exception of the ones occurring at Wye Terrace; these undoubtedly being attributable to sewer gas from defective and broken attachments from the houses to the principal sewer, filling such houses with the poison, as reported to the Mayor and Corporation marked No. 3 hereto attached, and not only in this report, but since writing the same, and to this date Jan. 7th, 1882, two more of these houses in this terrace were found to be in a fearfully dangerous state, from the same defective connection sewer pipes. A more serious matter, than this, being delayed so long I cannot conceive, and however much I may feel disposed to be lenient to the Inspector of Nuisances for not attending to my orders the beginning of August last, still I feel I have a duty (and a reponsible one) to the public, to again mention this matter and I would draw their attention to my September report to the Mayor and Town Council thereon, marked No. 3. I have in my possession four declaration from tenants occupying these houses to the effect—"That no internal examination of these houses and premises was ever instituted or carried out by the Inspector of Nuisances until after August 23rd."

This negligence is I consider, fraught with the greatest danger to people residing in such houses: indeed I know of nothing so bad as being compelled to continually inhale sewage gas, and had not the greatest precautionary measures been adopted, enteric fever would have inevitably followed. I demanded an inquiry for this neglect, which was held on December 6th last, by a Committee appointed by the Town Council; the result being the report hereto attached, marked No. 5.

As to Supervision of this city (by myself) it has been very heavy; no less than 700 visits of inspection and direction this year have I given to the Sanitary requirements therein.

Offensive Trades are all under my direction. The sewer ventilators and gullies thereto attached have been severely complained of by many, and in some cases condemned by me as allowing sewage gas to escape therefrom. These serious matters were at once inquired into after my official report of September last, marked 3, hereto attached, was presented to the Mayor and Town Council, who thereupon ordered their Surveyor without delay to report upon, and at once remedy the same; the Surveyor's report I also hereto attach, marked No. 6.

Of work done by the Inspector of Nuisances for the last 12 months, he returns the following :—

From Water Closets, Privies, and Drains ...	139
,, Pigs, Pigs' Wash, and Offal	48
,, Dung and Ashes	76
,, Sundry other causes	57
Making a Total	320

The Public Provision Markets have had my inspection every market day during the year, and I have not met with any case of unwholesome food.

The Slaughter-houses and Lodging-houses have also had my attention, all having been cleaned and limewashed twice during the year.

I would also state that I have attended every Committee Meeting that has taken place.

(Signed) B. B. BRIDGEWATER.

The fourth house-to-house Sanitary Survey is being continued, it having been commenced in May last, and continued until September only, in consequence of the Inspector's time being taken up in the disinfection of houses and things impregnated with the infection of scarlet fever. A list of which houses and things, I have now in my possession, as requested.

As regards the water supply to your city it maintains its usual standard of purity, being by analysis as follows :—

Total solids 6·49 per gallon ; oxydisable organic matter ·600 per gallon ; hardness 6·30 degress ; albumenoid ammonia *nil.* Free from smell or taste ; colour bright and clear.

VAVASOUR SANDFORD, M.D.,
L.R.C.P., London ; M.F.S.G., and F.G.S.

Bridge House, Hereford, Jan. 10, 1882.

No. 1.

HEREFORD URBAN SANITARY AUTHORITY.

Hereford, March 31, 1881.

My report for the quarter ending to day gives a total number of deaths of 109. Of this total 28 are below five years of age, showing a decrease of 13 infantile lives this quarter compared with the corresponding one for 1880.

The causes registered for this 109 deaths are as follow:—Three from scarlet fever, 2 from diphtheria, 1 from enteric fever, 1 from diarrhœa, 1 puerperal or child-bed fever, 9 from phthisis, 1 from pneumonia, 19 from bronchitis, 2 from pleurisy, 11 from heart disease, 1 from injury, the balance from old age and other natural causes.

The prevailing sickness has been scarlet fever, diphtheria, and bronchitis: 13 cases of scarlet fever, 4 cases of diphtheria, and a large amount of bronchitis having come to my knowledge.

The scarlet fever cases were mainly owing to direct infection.

The diphtheria cases were entirely owing to sewer gas being allowed to escape through an aperture in a broken pan, all these cases occurring in one family.

The attacks of bronchitis have been very heavy this quarter, affecting all ages and conditions, owing to the late severe weather and the continued easterly winds.

On having the sewers excavated and examined, where the diphtheria cases occurred, such revealed a wretched state of your main sewer, the length of the street, such sewer being, in some cases, higher than the tributary drains from some of the houses, thereby causing regurgitation of the sewage therefrom into the basement of many of the houses. This state of things must have continued for years, from the samples of sewage fungi examined. I am, however, pleased to inform your Committee that these Sanitary shortcomings were at once corrected by the owners of property therein; and, further, that as soon as your Sewers Committee were made acquainted with the fearfully defective mains, they without delay at once ordered a new and larger main to be constructed, lowering or sinking the same two feet more than the old one, this being now of a sufficient depth and capacity to take all sewage from houses attached thereto.

Of general subjects, I have only to mention that the water from your works has regained its standard of purity.

I would also mention that I have ordered a fourth house-to-house survey sheet to be made from May 1st, and continued until complete by your Inspector of Nuisances.

I am, Mr. Mayor and gentlemen,

Truly yours,

VAVASOUR SANDFORD.

No. 2.

HEREFORD URBAN SANITARY AUTHORITY.

Hereford, June 30th, 1881.

Mr. Mayor and Gentlemen,

I have pleasure in reporting to you to-day that your rate of mortality has materially decreased, the number of deaths from all causes for the quarter ending at the above date being only 69 against 109 for the quarter ending March last, showing a decrease of 40 in the three months; and if we deduct 5 of such deaths which occurred in your infirmary, and 7 in the workhouse (a large majority of these 12 deaths occurred to people brought to these establishments from the country, who, truly speaking, were non-residents of your city), it will reduce the total number of deaths to 57, thereby giving a rate of mortality of 2·8 per 1,000 for the last three months upon an existing population of close upon 20,000, which, if computed and taken for a whole year, would bring our rate down to less than 12 per 1,000. This great reduction in the rate of mortality is commented upon by Mr. Griffiths, the registrar for your city, in his fortnightly return to me last week. "As a lower death-rate than any before returned for over twenty years." And this is not all, gentlemen. I beg to inform you that the total number of deaths occurring to infants and those under five years of age only amount to 15 this quarter against 28 for last quarter, reducing the rate of mortality amongst infants, &c. to considerably less than 1 per 1,000 from all causes upon the said population of 20,000.

I have further gratification in also informing your Sanitary Authority that, with the exception of one death emanating from scarlet fever, I have not another to report as from infectious or contagious disease; and, as to prevailing sickness for the said quarter within your city, there is little or none to mention of a zymotic type saving the important case of smallpox, which (as I reported to your committee) was brought into your city by a tramp from London, who, last Whit Monday, was observed to be walking about your city with this infectious disease fully developed all over him.

I am, however, pleased to inform you by my timely instructions being properly and energetically carried out by Mr. Mason, the Master of the Union Workhouse, strict isolation and disinfection have proved of the greatest service in arresting and preventing the spread of this fearful disease, the man having recovered without having communicated the infection to anyone else to this date, plainly proving that the energy displayed by Mr, Mason in carry-

ing out my orders was effectual in arresting the disease. And allow me to inform you, gentlemen, it is not the first time I have had to admire such energy on Mr. Mason's part in an outbreak of a similar type in another part of the county, fully proving to all that if an hospital were provided for your city and county to receive infectious disease (placed under good hands, similar to Mr. Mason's), we should soon hear very little of such infectious and horrible disease being distributed broadcast over some parts of the kingdom, as it now is.

Of general subjects to bring before you, I would state that the water supplied to your city from the Water Works continues to maintain its well-deserved character for purity and excellence.

The house-to-house Sanitary Survey is being continued by the Inspector of Nuisances with excellent results.

It now only remains for me to call your attention to the large number of stray dogs being allowed to roam about the city during the hot weather. I must ask your Board to issue the usual order for destroying these dogs if not owned within a certain time.

I am, Mr. Mayor and Gentlemen,
Your obedient servant,
VAVASOUR SANDFORD.
M.D., L.R.C.P., London, &c.

No. 3.

HEREFORD URBAN SANITARY AUTHORITY.

Hereford, Sept. 30th, 1881.

Mr. Mayor and Gentlemen,

I have pleasure in presenting you with my quarterly report ending to-day (as regards the death-rate), the same revealing a lower rate of mortality from all causes, than any other on record, on a population of 20,000. Last June's report gave a rate of about 2·8 per 1,000, or not quite 12 per 1,000 for the year; this quarter the total number of deaths from all causes amount to 62. Of this total 7 were imported cases, occurring in your Infirmary, and 4 in the Workhouse. By subtracting this 7 and 4 as not belonging to the population proper of your city, it will reduce the total 62 deaths to 51 only, giving a rate of mortality (on such 20,000 population) of 2·5 per 1,000, or an annual rate of 10 per 1,000. I believe this to be a lower rate of mortality (on so large a population) than any other inland town in the United Kingdom.

Of these 62 deaths, 23 are below five years of age; the causes registered being 2 from scarlet fever, 3 from diarrhœa, and 4 from

bronchitis; the balance emanating from disease of a non-zymotic type.

Of prevailing illness this quarter, scarlet fever has assumed a threatening aspect, amounting to an epidemic, although of a mild type; still, I regret to say about 78 cases within your city have come to my knowledge, 62 of which I have positive information, were true cases of scarlet fever, existing in the following localities:—1 in Gaol-street, 2 in Green-street, 1 in Aubrey-street, 4 in Millbrook-street, 2 in St. Martin's-street, 1 in Hinton-lane, 2 in Hinton-road, 1 in Blackmarston-street, 1 in Hinton, 5 in White-cross-street, 1 in the Barton, 2 in Cotterell-street, 16 in Paradise-row or place, 1 in Grand Stand-road, 1 in Portland-street, 1 in Mill-street, 3 in Lawns-terrace, 5 in Monkmoor-street, 2 in Portfields-street, 1 in Barracks, 5 in Foley-street, 1 in Bath-street, 2 in Scutmill-road, 1 in Eign Hill-road. These, with 16 of a doubtful character (they not having had any qualified medical attendant), make a total of 78. I am, however, of opinion there have been many more, but from whom I can obtain no authentic information.

On inquiring the cause of this fever, and the Sanitary condition of the houses and localities, it will be made apparent where sanitation was wanting and deficient, there fever spread; take, for instance, Paradise Row, where 16 cases have been, By the urgent solicitation of many gentlemen residing in the parish of Holmer, I visited this nest of filth and fever, where to eight houses occupied by 35 people, was only one W.C. with two pans divided by a partition for the lot, and on using this W.C. the drains, &c., therefrom were so defective that when water was let down it drove the filth out of the sewer pipe into a grid on to the path, a yard only from the door of one of the houses. At the back or rear of these houses are eight more, seven of which are occupied by 27 people; for these 27 people there is only one W.C., with one pan only. The whole 16 houses are under one roof, back to back, no through ventilation whatever, or any back entrance to either. A better constructed place for the propagation and development of infectious disease there could not be found in your city. On the day of my visit there I found childen recovering from this fever, in a highly infectious stage, out of doors playing with those who had not yet succumbed to the contagion, the chief resort of these children being the aforesaid W.C. and a filthy washhouse close by the side of it.

The only return I received from your Inspector of Nuisances in answer to printed questions as to the Sanitary condition of this den of filth was, "Rather confined, but clean." Again, in one house at White Cross-street three cases have been. The drains to these premises were defective, and overcrowding existed. Also in a house where fever was, at the Barton, is an open cesspit, as also pigs kept without proper drainage,

Again in Cotterell-street, where three cases existed, three pigs are kept, with very doubtful drainage. In Gaol-street, where death has been from this fever, the drainage was defective. Again, in Mill-street, the house was simply filthy. Also, in Portland-street, the gas from the W.C. was found to be in the sleeping room, and at Millbrook-street, where four cases of fever were, pigs are kept with simply a hole in the earth for the reception of the sewage therefrom.

And so I could go on. And what is worse to relate, I conscientiously believe (with the exception of two or three houses), out of the whole number, up to the date of this report, there has been no disinfection insisted upon after convalescence of the patients, either by lime-washing, chlorine, sulphur fumigation, or a rag of clothing from any patient having been submitted to disinfection by means of your costly disinfecting apparatus, with the exception of the two or three alluded to.

I would ask what amount of contagion will be retained in the summer clothes now stowed away, and when re-opened for next summer's use, what the result?

Of prevailing sickness, and next in magnitude to scarlet fever, diarrhœa has been most prominent, three infantile deaths having occurred this quarter and about 30 cases recovered, four of which assumed the enteric type, and were caused by sewer gas being driven into the dwellings of the sufferers, more particularly at Miss Barratt's, 3, Wye Terrace, and Mr. B. Mills, 4, Wye Terrace.

At No. 3, Wye Terrace, the main sewer was by my order excavated, and found to have separated from the attachment pipe from the house nearly three inches, allowing the sewage to escape into the basement of No. 3 and 4 houses, which on inspection must have been going on for years. The heavy rains of August caused the watershed from the roofs to flow into the basement of these attached houses, consequently flooding the same and driving the sewer gases (that had lain dormant under the basement for months), into the dwellings of 3 and 4, Wye Terrace. On the 18th August last I was called into Miss Barratt's, 3, Wye Terrace, whom I found dangerously ill with enteric diarrhœa.

I do not hesitate to say, on my first visit at this house, there was not a cubit yard of air space (from the basement to the roof) that was not highly charged with sewage gas, this lady at the same time being confined to her bed, seriously ill from the poisonous properties of such gas. Of course, every window and door, was at once opened and ordered by me to remain so, night and day to allow the pent-up gas to escape, the same precaution being adopted in Mr. Mills's house next door.

I would draw your attention to the fact that repeated complaints were made to your Inspector of Nuisances calling his urgent attention to the offensive condition of these premises between the

1st August and the date of my visit on the 18th; twice by Mrs. Mills, twice by Mr. Henry Mills, and from that date to 23rd August twice by Mr. Mills himself; besides this, on the 3rd of August I personally called his attention to the insanitary state of this terrace. I did so again on the 10th of the same month, and on the 17th wrote him demanding his immediate attention thereto. The only reply I got was as follows:—

"August 17, 1881.

"Sir,—Wye Terrace has had my attention and 'inspection,' the circumstances of which I intend bringing before the Sanitary Committee on Monday, both as to the drains and water service, &c., &c.

"Signed) B. B. BRIDGEWATER."

Now, gentlemen, I will positively assert to the best of my belief (and many others will do the same who are residing in the terrace), that your Inspector of Nuisances never visited or entered any house in Wye Terrace from 1st August until 6.30 p.m. August 23rd, although six applications from Mr. Mills and his family had been made for him to do so between these two dates. I further declare I gave him notice on the 3rd and 10th verbally that the sanitary condition of Wye Terrace was not safe! As complaints still continued to come in I wrote him as I stated on the 17th and on the 23rd, served him with legal notice calling upon him to insist upon sanitary difficiencies being made and put in order forthwith at Wye Terrace, and not until 6.30 of 23rd August did he take any action thereon. I have given you full particulars in order that you may institute every inquiry, and submit. Had this state of things been inquired into by your Inspector of Nuisances at Wye Terrace (weeks earlier) much suffering and disease would have been prevented. The neglect shown by him I consider unjust towards your ratepayers and highly dangerous to the public if allowed to be repeated.

The idea of so important a matter (as life and death being at stake) to be deferred, as he specifies in his letter to me, until your Sanitary Committee met on the Monday following the date of my letter of 17th August (5 days mind you) is simply preposterous, fraught with much danger to her Majesty's subjects, and is a violation of the Public Health Act 75, section 41.

I would also observe that many applications had been made by the tenants of Wye Terrace to Mr. Boulton, the landlord, prior to the above date, begging of him to do the necessary Sanitary work, but all to no purpose, he flatly refusing.

I am now also compelled to submit copies of the following very serious complaints relative to your sewers and the gases therefrom. I positively now certify the annexed statements to be true;—

From Major-General H. L. Grove, Cedar House, Aylestone Hill, to

Dr. Sandford, Medical Officer of Health, Hereford.

Sir,—I have the honour to invite your immediate attention to the very horrible offensive smell that pours forth from the sewer of this road. For several weeks past, owing possibly to the present direction of the wind, the foul stench has been blown across the lawn into my house and enters the front bedrooms.

This has occurred each year of my occupation of this house, but never have the gases appeared so powerful and distressingly evident as at present.

Two years ago when my wife died, a suspicion was entertained of her having been poisoned by the stench issuing from this drain, but now the nuisance has become so alarming that I shall deem it necessary to leave this house at an early date, and before the expiration of my lease, unless immediate steps be adopted for the removal of the cause of it,

If you refer to my neighbours, Mr. Armstrong and Colonel White, you will be informed by them how greatly they are annoyed by this grievance, although their houses are not affected to the same degree as mine is.

I have the honour to be, Sir,
Your most obedient Servant,
H. L. GROVE, Major-General.

Cedar House, Aylestone Hill, 6th September, 1881.

From Colonel White, Pyon Lodge, South Bank, Aylestone Hill, September 13th, 1881.

I endorse the within complaints by General Grove as regards the stench issuing from the main sewer.

(Signed) C. M. WHITE, Colonel.

From John Ward Armstrong, Esq., Fenton House, Aylestone Hill.

I endorse the within complaint as regards the stench issuing from the main sewers.

(Signed) JOHN WARD ARMSTRONG.

September 13, 1881.

From Major Doughty, Hampton Park.
September 5, 1881.

Dear Sir,—The Town Council have recently placed three or four ventilators for the main sewer between the Barracks and the back road to the railway bridge. Coming that road with some friends the stench was something sickening. Surely it cannot be a Sanitary measure, these ventilators? I have often noticed it, but to-day we have to walk some 500 yards in a stench that could only

be equalled by placing one's head for some minutes down a water-closet. Even along the Infirmary-road it is much complained of.

I mention this because I think you are not aware of it; and if the Town Council go on placing these ventilators *ad libitum* without consulting you in any way the whole town will smell like a privy, and it stinks enough now.

I will take this opportunity of mentioning a fact, that during the hot weather the Litley pool was so offensive to the eye, as also to the nose, that I should have drawn your attention to it officially, and reported the matter to the proper authorities in London.

Yours sincerely,

(Signed) C. DOUGHTY.

From J. Ward Armstrong, Esq., Great Western Railway, Northern Division, Engineers' Office.

Hereford, September 21, 1881.

To H. V. Sandford, Esq., M.D., Medical Officer of Health, Hereford.

Sir,—I beg to call your immediate and serious attention to the stenches arising in Bodenham-road and South Bank-road from the gully holes by the kerb side of the roads, and from the openings into the sewers in the middle of the roads.

A water cart went round the gully holes a day or two ago, but in consequence of their imperfect and improper construction the water leaks away and does not seal up the communications with the sewer. These brick cesspits should be removed, and proper cast-iron box syphon traps put in their place. With respect to the central openings into sewers, they are too frequent; one nearly opposite General Grove's residence is a fearful nuisance.

I trust you will be able in the interest of the public health to remedy what is so dangerous a nuisance.

Yours faithfully,

(Signed) J. WARD ARMSTRONG.

These different localities I at once visited, and found the statements in the above letters true, whereupon I wrote to your late Surveyor, calling his immediate attention thereto under sec. 19 of the Public Health Act, 1875, wherein it expressly specifies:

"Every local authority shall cause the sewers belonging to them to be constructed, covered, ventilated, and kept so as not to be a nuisance or injurious to health, and to be properly cleansed and emptied."

All I got in reply was the following letter from your late surveyor, I, at the same time, serving him with notice that such sewers were injurious to health:—

Surveyor's Office, 143, Widemarsh Street,

Hereford, 14th September, 1881.

Sir,—I beg to acknowledge the receipt of your notice respecting the sewers in Bodenham-road and Harold-street, and beg

to say the sewers are as perfect as hands can make them, and well ventilated. It is quite a mistaken notion for gentlemen to imagine that the offensive materials which have to be carried from their houses into the public sewers can be conveyed away without occasionally having some bad smells arise from the ventilating shafts in the middle of the streets. The sewers are regularly flushed and kept quite clean, and they are as free from any deposit as the first day or hour they were laid down.

I have been up and examined the gullies and ventilating shafts, and find no nuisance arising from them; nevertheless, I do not say but what bad smells may arise occasionally which cannot be avoided.

I am, your obedient servant,

(Signed) GEORGE COLE, M.S.E., M.S.J.,
City Surveyor.

To H. V. Sandford, Esq.

Whether the last part of the above letter will meet with the requirements of the Public Health Act, 1875, clause 19, I must leave in your hands, only reminding you that blood poison and infectious disease have lately occurred where the complaints have emanated from; and I now again certify that the gases escaping from the unflushed drains and gullies were at the time of my visiting them highly injurious to public health.

Of general subjects I would now observe. The water supplied by your City Works continues to maintain its standard of purity and excellence, the analysis of which was, on September 29th inst. as follows:—

Water of the Wye, after passing through the filtering beds at Broomy Hill.

Total solids 7·34 per gallon.
Oxydisable organic matter 0·500 per gallon.
Hardness 6·30 degress.
Albuminoid ammonia a trace only.
Colour bright, and the water free from smell or taste.

H. VAVASOUR SANDFORD, M.D.

September 29th, 1881.

As regards other matters, I have to inform you that seven samples of milk have been examined by me this quarter, and from all I have obtained from 9·0 to 10·30 per cent. total solids, thereby proving all to be of a very fine quality.

Some Australian beef has also been submitted to me, which I pronounce as excellent.

Some American beef I was obliged to stop the sale of in consequence of its becoming influenced by the late hot weather, not that the constitution of the beast was in any way inferior

to the Australian beef, or inferior in quality by feeding, but simply becoming decomposed from keeping.

Four other samples of food I have examined; all turned out to be good and fit for human food.

I have only to add I much regret being compelled to lay these facts before your Board; at the same time the common dictates of humanity, coupled with the grave and responsible duties I am compelled to see properly carried out in this city and county, leaves me no other alternative; and to those who may have a wish to preclude the public from being made acquainted with the within facts, I would only ask them to place themselves in the fearful state poor Miss Barrett, her niece, and Mr. Mills and family were in, and what might not the result have been if timely assistance had not been rendered by me?

Let them take this to heart, as also a similar but more direful occurrence not very long ago in King-street.

And to arrest this epidemic we are now threatened with, I would suggest that your Sanitary Authority at once issue hand-bills, warning the public of the penalty they are incurring by exposing infected persons recovering from disease and calling upon them to carry out disinfection and other Sanitary measures at their houses.

And further, that as you are about appointing another Surveyor, he be compelled to render me immediate assistance where structural deficiencies exist—similar to the late King-street and Wye Terrace matters—in fact, making him Superintendent Inspector of Nuisances when I require it. The Public Health Act 75, clauses 19 and 41, specify it.

I am, Mr. Mayor and gentlemen, your obedient servant,

VAVASOUR SANDFORD.

No. 4.

HEREFORD URBAN SANITARY AUTHORITY

Hereford, 31st December, 1881.

Mr. Mayor and Gentlemen,—I am pleased to report to you to-day that the epidemic scarlet fever has almost disappeared from the city.

The total number of deaths within your city this quarter amounts to 68 from all causes, the same being registered as seven from scarlet fever, one from typhoid fever, one from erysipelas,

one from rheumatic fever, the balance from pulmonary and other diseases.

The typhoid case was undoubtedly an imported one into your city, being sent from Wales in an almost dying state; the man expiring in a few days after his arrival here.

The quality of the water supplied to your city maintains its usual standard of purity and excellence.

I must ask you to issue orders that your Inspector of Nuisances now proceed with the house-to-house Sanitary survey of your city, and that as soon as the sheets of such survey are filled in that the same be sent to me and checked.

It only remains for me to state that shortly I shall be in a position to present you with a copy of my Eighth Annual Report ending this year, wherein will be set forth the innumerable benefits derived by all classes of society within this city and county, by the Public Health Act, 72-75, according to the orders therein specified.

I am, Mr. Mayor and Gentlemen,
Your obedient Servant,
H. V. SANDFORD, M.D.

No. 5.

REPORT OF THE SANITARY COMMITTEE PRESENTED TO THE TOWN COUNCIL MEETING, HELD DECEMBER 6TH, 1881.

The Sanitary Committee, in accordance with the resolution of the Council passed at the last meeting, have considered the report of the Medical Officer of Health and report thereon as follows:—

(1). With reference to the paragraphs relating to the existence of scarlet fever in the city, and the allegation that in Dr. Sandford's opinion there had been many more cases than had been reported to him, the Medical Officer stated that although he had a firm belief that the statement was correct, he had no absolute proof of such being the case. The committee requested the Medical Officer to supply a list of these suspected cases, which he undertook to do, producing at the next meeting of the committee, a list of upwards of 30 cases.

(2). As to the remarks in the report respecting the sanitary state of Paradise-row, the committee ascertained that all the requirements of the Inspector of Nuisances had been carried out, seven W.C.'s being *now* on the premises in good working order.

(3). The nuisance complained of against the house at White-

cross has been abated. With regard to the premises at the Barton, referred to in the report, the committee were of opinion that the information supplied by the Inspector of Nuisances was unsatisfactory. The other cases referred to were of an ordinary character, and in the great majority of cases the matters complained of have since been rectified.

(4). The Medical Officer alleged in support of his statement in the report that the disinfecting apparatus, previous to 30th September, had only been made use of four times, and this was admitted by the Inspector, who stated that only about that number of cases were ready for disinfection before 30th September.

(5). With reference to the charge made against the Inspector alleging a want of attention on his part to the application of Mr. Mills, in Wye Terrace. The Medical Officer stated that he had given the Inspector of Nuisances verbal notice of his complain against the Wye Terrace premises on 3rd August, and also on 10th August, and had served him with written notice on 17th August. In reply the Inspector stated that he had never received notice on 3rd and 10th, but that the first complaint he had received was from Mrs. Mills on 11th August, that he visited the premises within two hours and found plumbers at work there, whose attention he called to the defective drainage, and that he again visited the premises on the 20th and 23rd August, and found the drainage under repair on each occasion, and served a notice on Mr. Boulton on the latter of these dates. The Inspector also says that he visited the premises on the 26th and 27th, and found the drains at Mr. Mills' completely repaired and in good working order. The statement of the Inspector is borne out by the entries contained in his journal, *but* in opposition to this the Medical Officer produced a certificate from Mr. Mills's family certifying to the truth of the allegations made in his report against the Inspector, and further produced the diary of the Inspector himself which contained no entry by him with reference to 4, Wye Terrace, until 23rd August. The committee have, however, been informed that the drainage of the house occupied by Mr. Mills was, so late as the 18th inst., *blocked up*, and has since that date to be completely renewed, and they are therefore of opinion that the Inspector of Nuisances did not properly discharge his duty with reference to the complaints against these premises.

(6). The complaints with regard to the ventilating shafts and the trapping of the gullies of the sewers were considered by the committee, who resolved that the attention of the Roads Committee should be immediately called to the matter with a recommendation that the ventilating shafts and gullies shall be altered or constructed in such a manner as shall prevent a continuation of nuisances so dangerous to health.

The foregoing are the results of the inquiry made by the

committee, and while they cannot help expressing their opinion that the Inspector of Nuisances has not given that attention to his duties that is required of him, they have his promise in the future so to perform those duties as to give no cause of complaint, either to the committee or the Medical Officer.

The committee have instructed the inspector as to the mode in which his books are to be kept, so that in the future they will be better enabled to see that his duties are discharged efficiently.

EDWIN EDWARD BOSLEY, CHAIRMAN.

No. 6.

COPY REPORT OF THE SURVEYOR FOR THE CITY. TO THE SANITARY COMMITTEE OF THE URBAN SANITARY AUTHORITY OF THE CITY OF HEREFORD.

9th January, 1882.

SIR AND GENTLEMEN,

I have made an examination of the sewers, ventilators, gullies, and to some extent the house drainage, at Bartonsham, Meyrick, and Bodenham-roads.

Sewers.—The sewers are free from deposit, where they intersect the ventilators, but in the absence of manholes and camp-holes, I am unable to say that this is so throughout, or that the gradients are correct.

Gullies.—The gullies are built of bricks, with a dip stone trap.

Ventilators.—Many of the ventilators have more to do than they can properly perform, and some are in unsuitable positions. There are three only, in a length of 684 yards, for the Bodenham-road sewer; the one at the bottom almost invariably acting as a downcast air shaft, while the one chiefly complained of near the dead end, opposite Colonel White's house, at the summit of the sewer, is just as frequently acting as an upcast shaft for sewer-gas.

Private Drainage.—House drains, before and since your bye-laws came into force, have been constructed on wrong lines, and in contravention of your bye-laws. Water closets, surface gratings, and other inlets to the drains are—with the exception of their own traps—in direct communication with the sewers, no trap being inserted for the purpose of cutting off sewer gas; some of the soil pipes are not even ventilated, others are only partially so, viz., by 2 pipes having right-angle bends, horizontal position of pipes, and other obstructions to free

ventilation. In proportion to the deviation from your bye-laws, in carrying out private drainage, so has zymotic disease been more or less active.

Recommendations.—Future sewers should have shafts at each change of inclination or gradient, so as to avoid breaking open the ground for inspection.

Gullies of impermeable materials are more reliable, and but little more costly than brick.

I recommend one of Latham's charcoal ventilators at each of the places, where the open ventilators have been temporarily sealed. and three additional open ventilators on the Bodenham-road sewer,

In respect to private drainage. I have simply to recommend that your bye-laws be adhered to.

The printed extracts from bye-laws, and lithograph sketch annexed, show the method of trapping and ventilating in accordance with the 261st, and other sections of yonr bye-laws, and are also in conformity with the model bye-laws issued in 1877, by the Local Government Board.

I am, Gentlemen,

Yours obediently,

J. PARKER.

THE HEREFORD RURAL SANITARY AUTHORITY

Population (*Census*, 1881) 17,482.
Parishes, 42.
Area in Acres, 70,974.
Aggregate number of people to acre, 246.

December 31, 1881.

Gentlemen,—Pursuant to the order from the Local Government Board, London, dated March, 1880, I now present you with the Eighth Annual Report of the Sanitary condition of your Union, comprising 42 Parishes. In doing so I have the greatest pleasure, as on perusing the accompanying tables prescribed by the Local Government Board, marked A and B, together with those drawn out and compiled by myself, evidence is at once brought before you of the undeniable benefits achieved by your so energetically carrying out the Public Health Act 1872 and 1875, throughout the whole of your Union area; indeed you now rank (as one of the combination of Sanitary Authorities, extending over a larger area than any, and with a population of nearly 17,500) to be the healthiest in such combination, as these tables (showing the gradual but persistent reduction of the annual rate of mortality from the eight chief zymotic diseases for the last seven years) fully confirm.

Hereford Rural Sanitary Authority.—Table showing the number of Deaths in each year for the last seven years ending December 31, 1881, from the eight chief zymotic diseases:—

The Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Smallpox	—	—	—	—	—	—	—
Measles	1	6	1	3	—	—	—
Scarlet Fever	7	45	11	1	2	—	2
Diphtheria	1	—	3	1	4	4	2
Whooping Cough	3	12	—	—	7	—	—
Typhus Fever	—	—	—	—	—	—	—
Enteric Typhoid and Continued Fevers	6	3	2	2	1	4	—
Diarrhœa and Dysentery ...	8	13	2	7	3	10	2
	26	79	19	14	17	18	6

From this table of the eight zymotic diseases, and the annual lessening thereof, follow me by reading the table of

mortality from all causes for the last seven years, wherein is perceived (at a glance) the meritorious and wonderful response to the demand of the before mentioned Public Health Acts.

Table showing total number of Deaths from all causes in the seven years ending Dec. 31, 1881, in Hereford Rural Sanitary Authority.	1875	1876	1877	1878	1879	1880	1881
	323	336	287	274	364	286	239
Rate per 1,000	21·3	22·7	19·3	16·0	21·0	14·8	13·6

From this table again let me direct your attention to the following table showing the annual Death-rate from all causes, of Infants and those under five years of age, for the last seven years :—

Table showing number of Deaths of Infants and those under 5 years of age from all causes, for the seven years ending Dec. 31, 1881.	1875	1876	1877	1878	1879	1880	1881
	69	107	70	54	92	64	54
Rate per 1,000	4·7	7·2	4·7	3 1	5·3	3·3	3·0

These tables *uncontrovertible, undeniable,* prove and fully endorse my prognostications of the benefits of the Public Health Act, to be derived before seven years had expired, *if properly worked.* This was foretold in my first Annual Report for 1874, in the following words thereon :—" Not only has it " been the means of discovering and arresting disease, but it has " pointed out to your different Sanitary Committees *where* such " disease may occur at any moment. It has done more : it has " pointed out to me the absolute necessity of at once losing no " time to enforce Sanitary measures, where for years both *water* " and *air* have been poisoned. It has shown in *many cases* in " *all* your districts that the want of these Sanitary arrangements " is conducive to the grossest immorality from over-crowding " and the want of proper bedroom space and accommodation. " It has pointed out to you and the Landed Proprietor that " throughout the county the dwellings of the valuable agricul- " tural labourer in a great majority of instances are totally " without any Sanitary arrangements whatever ; that the cubic " feet of pure air prescribed to maintain health is sadly deficient. " It has proved beyond argument that *where* such Sanitary " deficiencies exist the labourer is in great measure incapacitated " from undergoing the fatigues of a day's work ; that where " these shortcomings *are there are the highest poor-rates ;* that " *where* these Sanitary arrangements have *been supplied,* there " little or no pauper sickness is heard of ; *that the labourer* " *and his offspring are unquestionably superior in stamina*

"*and less prone to infectious disease.* It has brought to my "notice that hundreds of families have had no water "to make use of but what had been caught from the surface in a "hole dug into the earth highly charged with filth of all deno-"minations, and literally moving with animalculi during this "last dry summer." This evidence before your several Sanitary Authorities I maintain, gentlemen, I have accomplished what I in 1874 promised, as on referring to the following Table of Births it will be at once made apparent that your Sanitary Authority's district *now very nearly* returns a total of double the number of Births compared with and against that of the total of Deaths for the year 1881, being Births 459, Deaths 239:—

Table showing number of Births for the last seven years, ending Dec. 31, 1881, in the Hereford Rural Sanitary Authority.	1875	1876	1877	1878	1879	1880	1881
	409	469	491	496	443	475	459

Having briefly gone into this valuable statistical evidence, I will now advert to the Local Government Board's Tables A and B, herewith.

And touching upon A first, I would observe, with reference to the two

Scarlet Fever deaths therein mentioned, that these are unquestionably the result of many cases being brought into and conveyed from the City of Hereford during the epidemic, altogether about 50 cases, necessitating my advising the closing of three of the Public Schools in the Parishes of Lugwardine in the Fownhope district, and two in the Parishes of Clehonger and Bullingham in the Dewchurch district..

Diphtheria is next to be remarked upon by me; two deaths therefrom are recorded. One I pronounce as not true diphtheria, as from the death certificate will be seen first "Mumps," then "Tonsilitis," and then "Diphtheria." Where this death occurred there are no Sanitary deficiencies to account for it. The other death occurred in a family residing at a cottage situate at Lugwardine Bridge; three of this family were attacked, the cause unquestionably being the fearfully insanitary situation of this cottage, the same being built in the bed of the Lugg River, about twelve feet from the bank dividing or splitting the river (so to speak) in order that the stream formed another water course between this cottage and the bank to turn a large water wheel. This cottage can only be approached by a bridge and the entry to such cottage is over it, into the only door to the cottage, there being no entry or an inch of ground at the rear

TABLE **A.**

TABLE of DEATHS during the year 1881 in the Four Divisions of the Rural Sanitary District of the Hereford Union, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all ages.	Registered Births	Mortality from all causes, at subjoined ages.							Mortality from subjoined causes, distinguishing deaths of children under five years of age.																				
																	Continued Fevers.													
	Census 1881.		At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards		Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough	Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
1	2	3	4.	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Dewchurch	4524	120	49	9	5	6	3	9	17	under 5	...	...	1	...	..	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...	9
										5 upds.	...	...	...	1	...	...	...	...	...	.	...	...	...	...	...	...	4	5	5	1	19
Fownhope	5652	140	64	8	4	6	...	15	31	under 5	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	3	...	1	7
										5 upds.	...	...	1	1	...	...	...	...	...	1	...	1	1	...	..	...	2	9	8	4	24
Burghill	7306	199	98	22	6	1	6	27	36	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	5	...	3	19
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	14	11	14	4	26
County Asylum	...	...	28	...	...	...	1	14	13	under 5	...	...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	3	...	21
Totals	17482	459	239	39	15	13	10	65	97	under 5	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	2	11		4	35
										5 upds.	...	...	1	2	...	...	...	...	...	1	...	1	2	...	...	. .	23	26	30	9	90

TABLE **B.**

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Four Divisions of the Rural Sanitary District of Hereford Union; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING TO this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

.....in Workhouse and Workhouse Infirmary.
492 among Out-door Paupers.
.. ...as In-patients of Infirmary.
.....as Out-patients ditto.
.....as Out-patients of ..... Dispensary.
150 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT, DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.																	
									Continued Fevers.										
			Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup (not "spasmodic")	Whooping Cough.	Typhus.	Enteric or Typhoid.	Other or Doubtful.	Diarrhœa and Dysentery.	Cholera.	Rheumatic Fever	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Other Diseases such as Chicken Pox, or Pneumonia, which the Medical Officer thinks well to record.
1		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Dewchurch	under 5	...	...	6	...	...	...	...	...	1	2	...	2	...	...	...	...	9
	5 upds.	...	2	5	..	...	...	...	...	1	1	...	3	...	...	...	...	6
Fownhope	under 5	...	...	3	1	...	...	...	...	...	2	...	2	...	...	...	..	7
	5 upds.	...	...	2	3	...	...	...	...	..	8	...	3	1	...	...	...	14
Burghill	under 5	...	...	3	...	...	...	...	...	...	3	...	...	...	...	...	..	7
	5 upds.	...	...	9	...	...	...	...	...	...	6	...	...	...	...	...	...	10
County Asylum	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Totals ...	under 5	...	...	12	1	...	...	...	...	...	1	7	...	4	...	...	...	...	23
	5 upds.	...	2	16	3	...	...	...	...	...	1	15	...	6	1	...	...	..	37

the River Lugg flowing against the *basement behind*, and the mill stream *washing the basement in front*, so that in flood time the place is nearly surrounded with water, which rises very often to within two feet or so from the two living room floors on the basement; thus during high water rendering this place dank, humid, and fearfully unhealthy, and what is worse still, during hot weather, and when the water is low, this river becomes very sluggish and offensive, at times giving off "bacteria and bacilli, and other malareous" exhalations about these premises. On or about the 7th March, 1876, I was on my rounds inspecting the county, and looked at this place, and at once entered my remarks thereon "as totally unfit for human habitation." I was therefore not surprised to hear in the early part of February last that diphtheria had broken out there. And again I visited the place (on or about the 10th February of this year), and returned it as dirty, damp, and very unhealthy, and condemned it to the Sanitary Authority on 26th February last. Up to this date there was neither W.C. or any Sanitary arrangement, no drainage to the house, everything was thrown over the bridge wall out of the only door which, if allowed to accumulate (in consequence of water being low) soon became poisonous, the only ventilation inside the house was one firegrate below and one above out of the five rooms. So that unless the inmates slept with windows open during hot weather the life giving properties of air were exhausted before three hours had passed. On or about 4th November of this same year I was again informed that scarlet fever had broken out in this family, and on the 5th visited the place, and found three cases of fever. The only difference I could perceive in the way of sanitation was simply the building of a *privy* under a shed which, in violation of the Rivers Pollution Act, allowed all excreta to pass into the water when it reached to a particular height. On December 31st I again condemned the place as being "unfit for habitation," and by the suggestion of the worthy Chairman, Sir Herbert Croft, Bart., an order was made by this Board to close these premises, or put them in sanitary repair, such order being made within 28 days, consequently ending 28th January, 1882, next.

Diarrhœa and Dysentery next draw attention. Two deaths therefrom only in the year for the whole district, one being under one year of age, the other above.

Rheumatic Fever follows, from which only one death is recorded, and needs little comment from me.

Erysipelas then follows with two deaths only, one in the Fownhope and the other in the Burghill districts to two old people.

Phthisis then returns twenty-five deaths, four under 5 years, and the balance being principally between 14 and 30 years of age, the chief causes being an hereditary and constitutional diathesis, and in two or three *climatic influences.*

Pneumonia, Bronchitis, &c., produce thirty-seven deaths, one less than for the year 1880, and needs no further comment.

Heart Disease does not show any material advance in the total this year.

Accidents are slightly in excess of last year.

Having finished the analysis of these Government Tables, I now go into routine work for the last twelve months, and from returns made by the Inspector of Nuisances the following has been accomplished by him.

Number of Nuisances removed by Mr. Fowles, Inspector of Nuisances, for the year, 1881:—

Defective Drains	29
Dirty and Offensive Privies and Soil ...	95
Stale Wash and Offensive Drains ...	62
Dirty and Offensive Pigsties	57
Bad Privy Accommodation	37
Houses Repaired	24
Ventilation to Houses	9
Dangerous Wells Altered	32
Overcrowding Abated	6
Notices Unexpired	3
Total	354

Added to this return his time has been considerably taken up in inspecting houses infected with scarlet fever, and the disinfecting the same by sulphur fumes, boiling, and carbolic acid and soap.

Inspection of Districts.—This has been carried out by myself wherever found requisite, and a fifth house-to-house Sanitary Survey has been commenced through the whole Union by the Inspector under my guidance.

The Water Supply has been by a minute investigation made, revealing considerable shortcomings, most of which are in course of being rectified by order of your Sanitary Authority.

Hop Picking accommodation has also had my supervision throughout the county, resulting in from 12,000 to 13,000 pickers or thereabouts, without any infection occurring therefrom.

I am, Mr. Chairman and Gentlemen,

Your obedient Servant,

VAVASOUR SANDFORD, M.D.,

L.R.C.P., London; M.F.S.G., and F.G.S.

Bridge House, Hereford, January 10th, 1882.

THE LEDBURY RURAL SANITARY AUTHORITY.

Population (*Census* 1881) 12,605.
Parishes, 22.
Area in acres, 48,783.
Aggregate number of people to acre, 258.

December 31, 1881.

Gentlemen,—Pursuant to the order of the Local Government Board, London, dated March, 1880, I have pleasure in presenting you with my Eighth Annual Report of the Sanitary condition of your Town and Union district. In doing so hitherto, it has been my custom to first ascertain by returns furnished me, the increase or decrease of the rate of mortality, and proceed to inquire personally the cause and influences of either of such increase or decrease. This scrutiny leads me to the conclusion that the rate of mortality for the year 1881 has increased 2 per 1,000 from all causes in your Union district; such increase being attributable mainly to the large proportion of deaths from those over 60 years of age, viz.:—

From	60 to	70	being	35	deaths.
,,	70 to	80	,,	40	,,
,,	80 to	90	,,	19	,,
,,	90 to	100	,,	5	,,
,,	100 to	104	,,	3	,,

Amounting to over 100 out of a total from all causes and at all ages of 223.

Having thus briefly accounted for such increase I will at once proceed to call your attention to the annexed table for the last seven years, showing the Deaths occurring from the eight principal zymotic diseases for that period.

Table showing the number of Deaths in each year for the last seven years, ending December 31, 1881, from the eight chief zymotic diseases in the Rural Sanitary District of the Ledbury Union:—

The Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Small Pox	—	—	1	—	—	—	—
Measles	2	1	—	—	3	—	—
Scarlet Fever	—	10	—	7	—	—	1
Diphtheria	1	5	2	3	5	2	8
Whooping Cough	—	4	1	—	3	—	1
Typhus Fever	—	—	—	—	—	—	—
Enteric Typhoid and Continued Fevers	—	—	2	—	—	—	—
Diarrhœa and Dysentery ...	—	4	2	1	—	1	2
	3	24	8	11	11	3	12

This table points out at once that diphtheria is the main slayer in the classes of zymotic disease, and having accounted in my former reports for the cause of such deaths to 1881, I will now do so for that year, for such 8 are recorded out of eleven cases of sickness therefrom that have come to my knowledge, five in the Ledbury district, three in the Yarkhill. One death was proved to have been in a child brought from a distance in the Ledbury district, and in the same family two more slight cases occurred. Two more deaths then resulted in the family of a labourer whose wife went out charing to the house of the first case alluded to. In neither houses were Sanitary deficiencies sufficiently made visible to account for these deaths; consequently I come to the conclusion that the first was the cause of the two other cases. The fourth case occurred to a child, who with his parents came for a time to reside at Castle Froome for a change of air, and occupied an old house that had been vacant for some time—very damp, and I should say the basement foul. The fifth death occurred to an infant five months old, with a cleft palate, residing in the town of Ledbury, who from its birth was never well. The three deaths in the Yarkhill district I demonstrate as two being from impure water drinking, being obtained out of a surface well to save time rather than go some 400 yards where good water was to be had. The third death I have ascertained to be of a sporadic nature, as also the balance of those in the Sickness Tables. There being only one death from scarlet fever this year needs little or no comment from me, further than to mention that a few scattered very mild cases have occurred throughout your Union district from infection brought. These cases of diphtheria and the one of scarlet fever finish my remarks as to the Zymotic Disease Table.

The annexed table shows the number of Deaths annually for the last seven years, as also the variable rate per 1,000 :—

Table showing total number of Deaths from all causes in the seven years ending Dec. 31, 1881.	1875	1876	1877	1878	1879	1880	1881
	260	211	211	219	247	201	223
Rate per 1,000	19·8	16·1	16·1	16·5	18·7	15·9	17·6

From this table I would draw your attention to the rate of mortality from all causes in infants and those under 5 years of age hereto attached :—

Table showing Deaths of Infants and those under 5 years from all causes, for the seven years ending Dec. 31, 1881, in the Ledbury Rural Sanitary Authority.	1875	1876	1877	1878	1879	1880	1881
	60	56	42	28	56	44	45
Rate per 1,000	4·6	4·2	3·2	3·0	4·2	3·3	3·5

Having now gone through the Death rate and causes thereof, I beg to submit the Births for the seven consecutive years :—

Table showing number of Births for the last seven years, ending Dec. 31, 1881, in the Ledbury Rural Sanitary Authority.	1875	1876	1877	1878	1879	1880	1881
	336	341	319	224	318	335	305

Annexed are the Government Tables A and B of sickness and deaths within your Union District, for the year ending December 31st, 1881, neither of which needs any comment from me further than already given. Of routine work I would observe, every district has had my personal supervision. That every house within your Sanitary district is being provided with water, or within from 500 to 600 yards of each house, either by sufferance from neighbouring wells under agreement, or wells sunk where practicable. That the work of the Inspector of Nuisances for the twelve months is as follows, and has been carried out to my satisfaction.

Returns of work done by Mr. Dingley, Inspector of Nuisances for the Rural Sanitary Authority of the Ledbury Union, for the twelve months ending December 31, 1881.

Number of Nuisances found to exist this year ...	146
Consisting of Drains new and repaired	40
Earth Closets and Privies supplied	7
New pans to ditto	4
Overcrowding	4
Pigstyes removed	17
Houses disinfected	4
Cesspools cleansed, repaired and bricked, and removal of offal all and other nuisances	70

It only remains for me to observe that the fourth house-to-house Sanitary Survey will be commenced shortly throughout your Union District.

I am, Mr. Chairman and Gentlemen,

Your obedient servant,

VAVASOUR SANDFORD, M.D.

Bridge House, Hereford, Jan. 7th, 1882.

TABLE A.

TABLE of DEATHS during the year 1881 in the Three Divisions of the Rural Sanitary District of the Ledbury Union, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all Ages.	Registered Births	Mortality from all causes, at subjoined ages.								Mortality from subjoined causes, distinguishing deaths of children under five years of age.																				
																		Continued Fevers.													
	Census 1881.		At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards		Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough	Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Ledbury	8646	214	149	27	6	7	3	47	59	under 5	...	...	1	2	..	1	...	...	...	2	...	...	...	...	...	...	...	3	...	1	23
										5 upds.	...	...	...	3	...	...	...	...	...	.	...	...	1	...	...	...	10	16	26	4	56
Workhouse	...	4	18	1	...	1	1	1	14	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	2	3	...	12
Yarkhill	3959	87	56	8	3	3	3	10	29	under 5	...	...	...	1	...	...	...	...	...	...	...	...	...	..	...	...	...	2	...	...	8
										5 upds.	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	2	8	1	31
	...	...	...	...	...	...	...	...	...	under 5	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	12605	305	223	36	9	11	7	58	102	under 5	...	...	1	3	...	1	...	...	...	2	...	...	...	...	...	...	...	6		1	31
										5 upds.	...	...	..	5	...	...	...	...	...	...	...	...	1	...	...	. .	11	20	37	5	99

TABLE **B.**

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Three Divisions of the Rural Sanitary District of Ledbury Union; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING to this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

85 in Workhouse and Workhouse Infirmary.
890 among Out-door Paupers.
.. ...as In-patients of Infirmary.
.....as Out-patients ditto.
.....as Out-patients of ..... Dispensary.
60 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT. DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.																
								Continued Fevers.										
1	11	Smallpox. 12	Measles. 13	Scarlatina. 14	Diphtheria. 15	Croup (not "spasmodic") 16	Whooping Cough. 17	Typhus. 18	Enteric or Typhoid. 19	Other or Doubtful. 20	Diarrhœa and Dysentery. 21	Cholera. 22	Rheumatic Fever 23	Erysipelas. 24	Pyæmia. 25	Puerperal Fever. 26	Ague. 27	Other Diseases such as Chicken Pox, or Pneumonia, which the Medical Officer thinks well to record.
Ledbury	under 5	...	...	1	2	1	...	...	...	...	15	...	...	1	...	...	...	6
	5 upds.	...	...	2	4	...	...	...	...	...	17	...	3	4	...	...	...	16
Workhouse	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	3
	5 upds.	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	4
Yarkhill	under 5	...	...	1	2	...	...	...	...	...	1	...	1	...	...	...	..	3
	5 upds.	...	...	1	3	...	...	...	...	...	4	...	2	...	...	...	...	4
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Totals ...	under 5	...	...	2	4	1	...	...	...	...	16	...	1	1	...	...	...	12
	5 upds.	...	...	3	7	...	...	...	...	...	21	...	6	4	...	...	..	24

THE LEOMINSTER RURAL SANITARY AUTHORITY.

Population (Census, 1881*)* 9,840.
Area in Acres, 64,316.
Aggregate number of people to acre, 152.

December 31, 1881.

Gentlemen,—Pursuant to an order from the Local Government Board, London, dated March, 1880, I now present you with my Eighth Annual Report of the Sanitary condition of your Union district. In doing so I have pleasure, as from what will be made apparent by the Local Government Board's Tables of Sickness and Deaths, marked respectively A and B, it will be at once seen that four cases of scarlet fever, one case only of diphtheria, and four of croup, constitute the total of zymotic diseases to be mentioned and commented upon by me, as requested by the Local Government Board's orders for the whole of the Leominster Rural Sanitary Authority; and further, that the total number of deaths from all causes now amount to 134 only. The following table of the eight chief zymotic diseases throughout your Rural District for the last seven years, compiled by myself, will afford you and my readers pleasure on seeing that 5 deaths only for the whole year constitute the total from such zymotic disease.

Table showing number of Deaths in each year for the last seven years, ending December 31. 1881, from the eight chief zymotic diseases in the Rural District of the Leominster Union :—

Table showing Number of Deaths in each year for the last seven years ending December 31, 1881, from the eight chief zymotic diseases in the Rural District of the Leominster Union :—

Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Small Pox	...	...	...	...	...	...	...
Measles	...	...	...	1	...	2	...
Scarlet Fever	4	1	4	...	...	6	4
Diphtheria	...	...	...	1	...	2	1
Whooping Cough	1	1	...	...	1	1	...
Typhus	...	...	..	...	...	...	...
Enteric, Typhoid, and Continued Fevers	...	...	...	1	1	...	...
Diarrhœa and Dysentery ..	5	2	1	5	3	4	...
	10	5	5	8	5	15	5

From this table refer to the annexed, the total from all causes, wherein will be seen a gradual decline in the Death rate, being now only 13·6 per 1,000 :—

Table showing Total Number of Deaths from all causes for the seven years ending December 31, 1881 :—	1875	1876	1877	1878	1879	1880	1881
	157	164	146	129	187	144	131
Rate per 1,000	16·5	16·7	15·2	13·4	19·6	14·7	13·6

Again, by referring to the following Table of Infantile Mortality, it will also be made apparent that good work is taking place :—

Table showing the Number of Deaths of Infants and those under five years for the seven years ending Dec. 31, 1881 :	1875	1876	1877	1878	1879	1880	1881
	22	34	40	35	40	39	31
Rate per 1,000	2·2	3·4	4·0	3·5	4·3	4·3	3·1

These tables, with the one showing the Birth rate, must satisfy all that your Sanitary district is in a very fair condition.

Table showing Number of Births for the last seven years, to December 31, 1881 :—	1875	1876	1877	1878	1879	1880	1881
	280	285	310	274	212	227	231

Such statistical records being undeniable proof thereof, I now attach the Local Government Board's Tables A and B referred to, and to analyze same take first

Scarlet Fever, showing four deaths all within the Bodenham district this year. These deaths are the result of a slight epidemic existing in the Parishes of Humber and Stoke Prior, two in each parish the beginning of the year; and altogether about seventeen cases necessitating the closing of the Public Schools for about three weeks. The cause of such fever being the infection lying dormant in an untenanted house that had had fever last year, in the Parish of Humber, to which house the mother of a family was sent to clean before its being tenanted again. Whilst the woman was so cleaning she took with her some of her children, who standing at the door of the cottage received and undoubtedly inhaled some of the dust from the sweepings of the walls and floors. These children then mixing with and going to school gave the majority of the cases the infection, and so the outbreak. This fever also predominated in the early part of the year in the Kingsland district, more particularly in the Parish of Aymestry, and a slight attack in another village necessitating the closing of the Public Schools at Aymestry for a short time. At such Schools the cesspools were found very offensive, situated much too close to the School-house. This being pointed out, the worthy Vicar at once took the suggestion of removing such cesspools, and in lieu substituted the earth closets, which have been found to answer admirably. This fever was proved to have originated

TABLE **A.**

TABLE of DEATHS during the year 1881 in the Three Divisions of the Rural Sanitary District of the Leominster Union, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all Ages.	Registered Births	Mortality from all causes, at subjoined Ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																				
																	Continued Fevers.													
	Census 1881.		At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards		Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough	Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Leominster	1860	46	19	2	5	1	2	4	5	under 5	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	4
										5 upds.	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	3	...	1	8
Bodenham	3710	64	44	7	5	5	...	8	19	under 5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	6
										5 upds.	...	...	3	...	...	...	...	...	...	...	...	...	...	...	..	...	2	3	4	1	19
Kingsland	4278	121	71	12	...	9	2	22	26	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	4	...	...	8
										5 upds.	...	...	...	1	4	...	...	...	...	...	...	...	...	...	...	...	4	...	8	1	41
	...	...	...	...	...	...	...	...	...	under 5	...	...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	9840	231	134	21	10	15	4	34	50	under 5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12		...	18
										5 upds.	...	...	3	1	4	...	...	...	...	...	...	...	...	...	...	..	9	3	12	3	68

TABLE B.

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Three Divisions of the Rural Sanitary District of Leominster Union; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING TO this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

.....in Workhouse and Workhouse Infirmary.
300 among Out-door Paupers.
.. ...as In-patients of Infirmary.
.....as Out-patients ditto.
.....as Out-patients of ..... Dispensary.
60 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT, DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.																
								Continued Fevers.										
		Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup (not "spasmodic")	Whooping Cough.	Typhus.	Enteric or Typhoid.	Other or Doubtful.	Diarrhœa and Dysentery.	Cholera.	Rheumatic Fever	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Other Diseases such as Chicken Pox, or Pneumonia, which the Medical Officer thinks well to record.
1	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Leominster...	under 5	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	
	5 upds.	...	...	...	...	...	...	...	...	...	3	...	...	1	...	...	...	2
Bodenham	under 5	...	...	11	...	...	...	...	...	...	1	...	...	...	...	...	..	
	5 upds.	...	...	14	...	...	...	...	...	..	4	...	...	...	...	...	...	2
Kingsland	under 5	...	...	10	...	2	...	...	...	...	...	...	...	...	...	...	..	
	5 upds.	...	...	11	...	4	...	...	...	...	2	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Totals ...	under 5	...	...	21	...	2	...	...	...	...	2	...	...	...	...	...	...	
	5 upds.	...	...	25	...	4	...	...	...	...	9	...	...	1	...	...	..	5

from the adjoining Weobley Sanitary Authority, where so many cases occurred last year, and fully reported by me in my report for 1880.

Diphtheria is next in rotation on the Government Tables, from which one death is recorded; also in the Parish of Aymestry within the Kingsland district, and occurred to a boy (a keeper's son) living in a well appointed house. This boy got fearfully heated at play, and to cool himself jumped into a river, went home, and very shortly died.

Croup is the remainder on the Tables, from which I can glean no cause more than being sporadic.

From vital matters I have only to report upon routine work, consisting first of that done by the Inspector of Nuisances, Mr. C. Thomas, whose returns are as follow :—

Houses limewashed and out of repair	9
Offensive Privies and Cesspools	35
Dilapidated Privies	10
Pigs kept near the house and filthy	10
Drains stopped up	13
Slop and Ashpit near house door	7
Wells out of order	3
Overcrowding	2
Total	89

Concluding with these reports it only remains for me to add the water supply is being regularly carried out where deficient, and also that the fourth house-to-house Sanitary Survey will be carried out through the year.

I am, Gentlemen,

Your obedient servant,

VAVASOUR SANDFORD.

Bridge House, Hereford, Jan. 8th, 1882.

THE BROMYARD RURAL SANITARY AUTHORITY.

Population (Census, 1881*)* 11,054.
Area in Acres, 61,659.
Aggregate number of people to acre, 163.

December 31, 1881.

Gentlemen,—Pursuant to the order of the Local Government Board, London, dated March, 1880, I have pleasure in laying before you my Eighth Annual Report upon the Sanitary condition of your Town and Union district, in which will be made apparent the rate of mortality for the year ending to-day from all causes, as also the six preceding years, which on perusing will be found such rate for the present year to have lessened two per 1,000 against last year's. I regret, nevertheless, to state such reduction of rate does not lead me to report your town and district to be near so free from zymotic disease as in the six previous years, there having occurred more deaths this year from this class of disease than any other recorded year for the period of the six years as per the following:

Table showing the number of Deaths in each year for the last seven years ending Dec. 31, 1881, from the eight chief zymotic diseases in the Bromyard Rural Sanitary Authority.

The Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Small Pox	—	No Returns for this year.	—	—	—	—	—
Measles	—		1	—	—	8	—
Scarlet Fever	—		1	—	—	—	5
Diphtheria	—		—	—	—	—	2
Whooping Cough	1		—	2	2	—	2
Typhus Fever	2		—	—	—	—	2
Enteric Typhoid and Continued Fevers	—		—	3	—	—	1
Diarrhœa and Dysentery ...	7		2	1	1	6	2
	10		4	6	3	14	14

In the order from the Local Government Board before mentioned, are tables sent for me to fill up. First, Table A, showing the number of deaths and the cause thereof, and in that of the second, Table B, the amount of sickness throughout your Union district. This last I have filled up to the best of my ability, through the help of your clerk, L. Cave, Esq., supplying me with

the pauper sickness in each district. The Union Surgeons (still refusing to comply with the Local Government Board's order of 1879, so to do) without being remunerated for their trouble. This help from Mr. Cave, together with what I have personally gleaned, by visiting the large amount of zymotic cases, enables me to present you with a fairly accurate account, in Table B, of the total amount of sickness for the year.

Having laid before you my calculations of the total deaths from zymotic disease, I now present you with a table showing total deaths in each year for the last seven years, less for the year 1876:

Table showing total number of Deaths from all causes in the seven years ending Dec. 31, 1881.	1875	1876	1877	1878	1879	1880	1881
	206	*	160	190	234	219	184
Rate per 1,000	17·2		13·4	15·7	19·3	18·1	16·6

* No Returns.

I also present you with a Table of Infantile Mortality, and those under five years showing an increase therein for the last year:

Table showing Number of Deaths of Infants and those under 5 years from all causes, for the seven years ending Dec. 31, 1881.	1875	1876	1877	1878	1879	1880	1881
	38	*	25	50	56	62	46
Rate per 1,000	3·1		2·0	4·1	4·6	5·1	4·1

* No Returns.

Having done this I proceed to lay before you the Births for the last five years, none having been furnished me for the years 1875-76.

Table showing number of Births for the last seven years, ending Dec. 31, 1881.	1875	1876	1877	1878	1879	1880	1881
	*	*	300	330	406	298	310

* No Returns.

These tables, compiled by myself, prove, although contending against considerable zymotic disease, a less rate of mortality from all causes than hitherto for the past three years.

Referring now (by request of the Local Government Board) to the cause of these deaths on Table A.

Scarlet Fever comes first, from which five deaths are recorded, four in the Brockhampton district and one in the Bromyard. Taking Bromyard first, I would observe an epidemic of rather a mild type made its appearance in the town, resulting in about 40 cases amongst all classes, added to which eight were in the Workhouse, seven being pauper inmates, the eighth a domestic. The cause of this fever I undoubtedly traced to an old woman coming from a long distance to a Licensed Lodging-House in this town, who, before doing so, had been engaged nursing many fever cases.

Five of the lodging-house keeper's children took the fever, but in consequence of its being of a very mild type no medical man was called in. These children were allowed to attend the public schools, and so inadvertently were the cause of the epidemic in the Bromyard district, as also those in the Workhouse, the pauper children from which place were sent to the town of Bromyard to attend the public schools. Scarlet fever also made its appearance in the Brockhampton district, as will be seen by Table A, causing four deaths in the parishes of the Sapeys. I found it necessary to advise the closing of the public schools for a time, and as the water supplied to these schools was from a very questionable source I advised a well being sunk which was done, and good water obtained. Strict isolation and disinfection was enforced in all cases as far as practicable.

Diphtheria follows in Table A, from which two deaths are mentioned, four cases of sickness therefrom in the Bromyard district, two of such being at a house where from exhalations from animal remains in a sepic state was the cause, killing one, the other two being of a sporadic type, and one being of a doubtful character.

Whooping Cough has been prevalent, killing one in the Bromyard and one in the Bishop Froome districts.

Typhus Fever produces two deaths, one in Bromyard district the other in the Brockhampton, altogether about nine cases. The Bromyard one occurred to the son of a well-to-do tradesman in the town of Bromyard. The most minute investigation could not trace the cause. Another case also occurred in the town, but without disclosing its origin after every inquiry, the woman recovering. Five more cases also I investigated, the cause being overcrowding by a very large family residing on the Downs in the Brockhampton district, all these being private patients recovered. The death of the other is attributable to want, and the house being very unhealthy and damp, situated in the parish of Edwin Ralph, in the Brockhampton district also.

Typhoid and Enteric Fever are the next, with one death recorded on Table A, which occurred to a well-to-do farmer residing at Whitbourne, in the Brockhampton district. The cause being the farmer returning from London with the same in a dangerous condition; no insanitation whatever visible at his house. Two mild cases are recorded on Table B, in the Bishop Froome district, undoubtedly owing to the defective drainage and other insanitary constructions of a farm-house in the parish of Cradley; and, although a "milk farm" supplying the town of Malvern, did not spread beyond this one house, the dairy being at once removed from the house and every other Sanitary precaution adopted.

Diarrhœa and Dysentary produce only two deaths, and about 25 cases altogether.

TABLE **A.**

TABLE of DEATHS during the year 1881 in the Four Divisions of the Rural Sanitary District of the Bromyard Union, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all Ages. Census 1881.	Registered Births	Mortality from all causes, at subjoined Ages. At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards		Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age. Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough	Continued Fevers. Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Bromyard	3449	100	57	9	8	7	3	10	20	under 5	...	...	...	2	..	1	...	...	...	1	...	...	...	...	...	...	1	2	...	...	10
										5 upds.	...	...	1	...	...	...	1	...	...	.	...	1	...	...	1	...	3	12	3	2	16
Bishop Frome	4031	130	66	13	5	6	2	12	28	under 5	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	6	...	1	10
										5 upds	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	4	3	7	4	30
Brockhampton	3574	82	48	8	2	5	1	10	22	under 5	...	...	...	...	...	...	...	...	...	1	...	...	...	..	...	...	...	2	...	...	7
										5 upds.	...	...	4	...	..	...	1	1	...	...	...	...	1	...	1	...	1	2	4	...	23
Workhouse	...	3	13	1	...	...	...	...	12	under 5	...	...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
										5 upds.	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	9
Totals	11054	310	184	31	15	18	6	32	82	under 5	...	...	...	2	...	2	...	...	...	2	...	...	...	...	...	...	1	10		1	28
										5 upds.	...	...	5	...	...	...	2	1	...	...	...	2	1	...	2	..	10	17	14	6	78

TABLE **B.**

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Four Divisions of the Rural Sanitary District of Bromyard Union; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING TO this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

57 in Workhouse and Workhouse Infirmary.
382 among Out-door Paupers.
.....as In-patients of Infirmary.
.....as Out-patients ditto.
.....as Out-patients of ..... Dispensary.
70 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT, DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.							Continued Fevers.										
1	11	Smallpox. 12	Measles. 13	Scarlatina. 14	Diphtheria. 15	Croup (not "spasmodic") 16	Whooping Cough. 17	Typhus. 18	Enteric or Typhoid. 19	Other or Doubtful. 20	Diarrhœa and Dysentery. 21	Cholera. 22	Rheumatic Fever 23	Erysipelas. 24	Pyæmia. 25	Puerperal Fever. 26	Ague. 27	Other Diseases such as Chicken Pox, or Pneumonia, which the Medical Officer thinks well to record.
Bromyard	under 5	...	...	1	...	...	3	...	...	...	...	...	...	...	...	...	...	2
	5 upds.	...	...	4	...	...	2	1	...	...	1	...	...	1	...	...	...	5
Bishop's Frome... ...	under 5	...	...	4	...	...	2	...	...	...	1	...	...	...	...	...	..	2
	5 upds.	...	...	1	...	...	1	...	2	...	3	...	...	...	...	...	...	2
Brockhampton	under 5	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	..	...
	5 upds.	...	...	15	...	...	...	...	...	...	3	...	...	...	...	...	...	5
Workhouse	under 5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 upds.	...	...	6	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Other Practice	under 5	...	...	13	3	...	...	1	...	...	7	...	...	...	...	...	...	...
	5 up s.	...	...	23	1	...	...	7	1	...	10	...	1	...	...	2	...	...
Totals ...	under 5	...	...	30	3	...	5	1	...	...	8	...	...	...	...	...	...	4
	5 upds.	...	...	49	1	...	3	8	3	...	17	...	2	2	...	2	..	12

Rheumatic Fever produce two deaths, for which I cannot account.

Erysipelas is also the cause of one.

Puerperal Fever caused two deaths, one being mainly attributable to the woman having contracted scarlet fever during parturition, in the Parish of Thornbury.

It only needs my adding that I have investigated all the before-mentioned cases personally very many times, that every Sanitary precaution has been adopted and promptly enforced both by isolation and disinfection.

The routine work of the Inspector of Nuisances for the whole District, Mr. Thomas Barrs, Bromyard;

Number of Nuisances found to exist	140
New Privies erected, &c.	10
Dwellings rebuilt or repaired	30
Dwellings cleaned, whitewashed, &c.	12
New Drains and Watercourses	16
Lodging-houses Inspected, &c.	3
Pumps put in order	4
Exposure of fish, unfit for human food, fined 10s., costs, 9s.	1
Overcrowding removed	3
Offal and other filth removed	25
Nuisances not yet complied with	36

In conclusion I would add the Inspector of Nuisance's time having been considerably taken up in disinfecting premises where scarlet fever predominated, he has been unable to complete the water survey supply.

I am, Gentlemen,

Your obedient servant,

VAVASOUR SANDFORD, M.D.

Bridge House, Hereford, January 11th, 1882.

WEOBLEY RURAL SANITARY AUTHORITY.

Population (*Census,* 1881) 8,178.
Area in Acres, 48.959.
Parishes, 28.
Aggregate number of people per acre, 187.

December 31, 1881.

Gentlemen,—The same order from the Local Government Board, as I have before mentioned, will apply also to your Sanitary Authority, and for such purpose Tables A and B have to be filled up by me, but before doing so I would observe your total of deaths from all causes only amount to 118 this year against 153 for last year.

Weobley Rural Sanitary Authority.—Table showing the number of Deaths in each year for the last seven years ending December 31, 1881, from the eight chief zymotic diseases :—

Eight Chief Zymotic Diseases in	1875	1876	1877	1878	1879	1880	1881
Small Pox	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...
Scarlet Fever	1	5	5	...	3	6	...
Diphtheria	1	...	...	8	5	7	1
Whooping Cough	...	...	...	...	...	...	...
Typhus	...	...	...	...	...	...	...
Enteric, Typhoid, and Continued Fevers	1	1	...	1	...	1	...
Diarrhœa and Dysentery ...	1	3	1	2	1	4	2
	4	9	6	11	9	18	3

By referring to the above table, showing the number of deaths from the eight chief zymotic diseases for the last seven years, it will be at once made apparent that comparatively speaking I have only one death to record in the Government Table marked A from

Scarlet Fever, which took place in the Weobley district in the parish of Byford, in which parish and the adjoining one, Mansell Gamage, and a few other parishes, altogether about 40 cases have been this year, all of a remarkably mild type.

TABLE **A.**

TABLE of DEATHS during the year 1881 in the Three Divisions of the Rural Sanitary District of the Weobley Union, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the year.

Names of Localities adopted for the purpose of these statistics: public institutions being shown as separate localities.	Population at all Ages. Census 1881.	Registered Births	Mortality from all causes, at subjoined Ages. At all ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 60	60 and upwards	Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.	Smallpox	Measles.	Scarlatina	Diphtheria	Croup (not "spasmodic")	Whooping Cough.	Continued Fevers. Typhus	Enteric or Typhoid	Other or Doubtful	Diarrhœa and Dysentery	Cholera	Rheumatic fever	Erysipelas	Pyæmia	Puerperal fever	Ague	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart Disease	Injuries	Other Diseases
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Weobley	4808	113	65	7	2	3	2	13	38	under 5	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	4	...	...	5
										5 upds.	...	...	1	...	...	..	...	...	...	...	...	...	...	...	...	...	3	4	9	1	38
Workhouse		...	9	...	2	...	...	...	7	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	...	1
										5 upds	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	1	...	...	6
Dilwyn	3370	97	44	9	1	1	1	12	20	under 5	...	...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	7
										5 upds.	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	4	5	...	22
Totals	8178	210	118	16	5	4	3	25	65	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8		...	13
										5 upds.	...	...	1	...	...	...	..	...	...	2	...	...	...	...	...	1	3	9	14	1	66

TABLE **B.**

TABLE OF NEW CASES OF SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1881, in the Three Divisions of the Rural Sanitary District of Weobley Union; classified according to Localities and Diseases.

SOURCES OF INFORMATION.

The figures of the columns following column 11 will have been derived from the returns of the Poor Law Medical Officers, from the practice of public institutions in or near the Sanitary District, and from other medical practice.

The Officer of Health making this report is desired to state below the numbers of persons BELONGING TO this division or district, who have during the year newly come under treatment for ALL KINDS of disease and injury, and of whose cases he has had information.

30 in Workhouse and Workhouse Infirmary.
258 among Out-door Paupers.
.....as In-patients of Infirmary.
.....as Out-patients ditto.
.....as Out-patients of ..... Dispensary.
40 in Other Practice. *

* This refers to cases of sickness not included in the previous classes, if the Medical Officer of Health has information of such cases from other sources.

NAMES OF LOCALITIES.		NEW CASES OF SICKNESS, IN PERSONS BELONGING TO THE DISTRICT, DISTINGUISHING THOSE IN CHILDREN UNDER FIVE YEARS OF AGE.																
								Continued Fevers.										
1	11	Smallpox. 12	Measles. 13	Scarlatina. 14	Diphtheria. 15	Croup (not "spasmodic") 16	Whooping Cough. 17	Typhus. 18	Enteric or Typhoid. 19	Other or Doubtful. 20	Diarrhœa and Dysentery. 21	Cholera. 22	Rheumatic Fever 23	Erysipelas. 24	Pyæmia. 25	Puerperal Fever. 26	Ague. 27	Other Diseases such as Chicken Pox, or Pneumonia, which the Medical Officer thinks well to record.
Weobley	under 5	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 upds.	...	...	10	...	...	...	...	...	...	2	...	...	...	...	...	...	3
Workhouse	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
	5 upds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dilwyn	under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
	5 upds.	...	...	...	...	...	...	...	...	...	11	...	...	1	...	...	...	3
Other Practice	under 5	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 upds.	...	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	under 5	...	...	17	...	...	...	...	...	...	..	...	...	...	...	...	...	...
	5 upds.	...	...	23	...	...	...	...	...	...	13	...	...	1	...	...	..	6

Next in rotation upon the Table B is seen

Diarrhœa and Dysentery, from which two deaths are recorded in the Dilwyn district, and about 11 other cases, all of a mild type, and two mild cases only in the Weobley district constitute all I have to report except

Erysipelas, from which was a mild case in the Dilwyn district.

The annexed Table will show the total deaths from all causes for the last seven years:

Table showing total number of Deaths from all causes for the seven years ending December, 31, 1881 :—	1875	1876	1877	1878	1879	1880	1881
	150	123	113	145	170	153	118
Rate per 1,000	16·4	13·6	12·5	16·0	17·7	16·9	14·4

And with the one following will show the Infantile mortality, and those under five years of age for the same period from all causes.

Table showing number of Deaths of Infants and those under 5 years of age, from all causes, for the seven years ending Dec. 31, 1881 :—	1875	1876	1877	1878	1879	1880	1881
	47	34	21	28	42	41	21
Rate per 1,000	5·0	3·7	2·3	3·0	4·5	4·4	2·4

Thus proving the benefits of the Public Health Act, 1872-75.

From this Table I now append the following, showing the Births for the last seven years :—

Table showing number of Births for the last seven yeers ending Dec. 31, 1881 :—	1875	1876	1877	1878	1879	1880	1881
	220	229	223	224	266	230	210

As regards routine work, I have given my personal attention to all necessary and herewith allude to the work of the two Inspectors of Nuisances.

Inspector of Nuisances for the Weobley District, Mr. Wm. Lloyd, Relieving Officer, Weobley, whose returns of work done for 12 months are as follow :—

Number of Nuisances found to exist in the Weobley District	126
Consisting of removal of Privies, altering Drains, removing Pigstyes, and Privies, and Cottages (common nuisances)	106
Overcrowding	11
Cottages Cleansed, Whitewashed, and Disinfected ...	8
Houses condemned	1
	126

In the Dilwyn District:

Inspector of Nuisances Mr. W. Vaughan, Relieving Officer, Dilwyn, whose return of work done for the 12 months is as follow:—

Nuisances found	69
Disinfected Houses and Nuisances to remove ...	8
	77

I have only to add that a fifth house-to-house Sanitary Survey will be commenced about March; also that the inquiry relative to the water supply has been laid before the Sanitary Authority, and active steps are now in hand to meet the deficiencies brought before them.

I am, Gentlemen,

Your obedient Servant,

VAVASOUR SANDFORD, M.D.

SANITARY HINTS.

Pure Drinking Water.—Avoid, as far as you can, every water which can even be *suspected* of contamination with the filth from sewers, house drains, privies, cesspools, and the like. See that cisterns and water butts are clean, and especially that the overflow pipes do not open direct into any drain. Water should be clear, colourless, and without smell. Water can only be really tested by a difficult and careful chemical analysis. Drinking-water is the better for being filtered. A costless filter may be thus made:—Take a flower-pot and plug the hole, not too tightly, with a piece of sponge; add a layer of powdered animal charcoal about one inch thick, then the same quantity of clean sand, and on that some coarse gravel. The charcoal should be occasionally re-baked or washed with Condy's Fluid; in epidemics of typhoid fever or cholera, the water should be boiled before filtration.

Drains, Closets, &c.—Flush and, if possible, scrub and cleanse once daily with plenty of water, containing some disinfectant, as crude sulphate of iron, chloride of zinc, carbolic acid, or Cooper's Patent Salts. See that the traps are well charged with water, that they do not allow bad smells to escape in the house, and that the main house drain is ventilated by the rain water pipe, by charcoal air filters, or otherwise. The pan of every W.C. ought to have a tube or shaft attached to the soil pipe just below the trap of the pan; this tube ought to be carried rather above the roof or outside the house, not near any window or water cistern. A two-inch zinc pipe will answer every requirement to allow the gases to pass up such tube that may generate or be driven in the soil pipe from a main sewer or cesspool that the soil empties into; thus preventing any party using such W.C. from inhaling and being poisoned by such gas when the pan has been used and the handle is being pulled up for flushing, cleansing, and emptying.

Ash and Privy Pits.—Cover, so as to keep them dry, well drained, thoroughly spread over with ashes or dry earth, frequently emptied, sprinkle with a disinfecting powder—(McDougall's or Cooper's)—and be careful that no slops are thrown in. Decaying animal and vegetable refuse are sources of danger, and should be buried or dug into the earth away from houses. Remove all pigs, poultry, and rabbits, some distance from living rooms.

Ventilation,—Keep rooms and passages sweet by opening doors and windows for admission of air. Fires greatly promote ventilation. Overcrowding is exceedingly dangerous. Whenever

possible, 500 cubic feet of air breathing space should be allowed to each individual in any sitting-room, bedroom, or work-room. Gas lights contaminate the air very rapidly. Pure air is less dependent on cubic space than on efficient ventilation, which may be secured by the following simple and economical method:—Raise the lower sash of the window two or three inches, and fill in the opening underneath the bottom rail with a piece of wood; this leaves a corresponding space between the meeting rails in the middle of the window, through which a current of air enters and is directed towards the ceiling, whence it should escape by a valvular opening. The fewer persons and things in a sick-room the better. Beds should be freely exposed to the air during the day, and soiled linen should not be kept waiting for washing in unventilated closets.

Clothing, Food, &c.—While warmth is kept up, transpiration should be free; in summer and autumn a broad flannel bandage should be worn round the abdomen, and the linen should be constantly changed. The food should be plain, fresh, wholesome, and sufficient; avoiding intemperance in both eating and drinking. Bodily weakness favours cholera, typhus, typhoid, and other fever, —therefore, avoid exhaustion, over-fatigue, and fear as much as possible. Milk, rice, meat, soups, potatoes, beans, pearmeal, bacon, entire wheaten bread and cheese are the cheapest nourishing articles of food. One of the most frequent causes of the early death of young children is improper feeding. The proper food of children is breast milk. When the mother and child are both healthy no other food is required for the first six months. When the child is first born no other food is required, and the practice of giving gruel, butter, honey, and castor oil to new-born babes is prejudicial to their health. When the mother has a deficiency of milk, cow's milk or Swiss milk is the best substitute. It should be given with a third of warm water and a little sugar. For the first six weeks the child should be suckled every two hours in the day and every three or four hours at night. Gradually as it gets older the intervals of feeding may be prolonged. Children should not be fed to keep them quiet but at regular intervals. Mothers should never fall asleep when suckling their babes, as this is one of the most frequent causes of suffocation in bed. A child should not be weaned suddenly, but by degrees, and ought not to have the breast after the ninth month. When the child has cut its front teeth it may have some light food, such as bread, baked finely ground wheaten flour, or milk biscuits, added to its milk, or "Liebig's Food;" and once a day, meat broth or beef tea, with bread or biscuits soaked in it; or the yolk of an egg lightly boiled; when it is a year and a half old, some fine chopped meat—but milk should form the principal part of its food. Solid meat and potatoes, fat, pork and fish, which form the food of grown-up people, should on no account be given to children.

THE SICK ROOM.—Keep sweet by a small fire and plentiful supply of fresh air, as above described: Remove bed-curtains, window-hangings, and carpets. Sweep rooms daily, and let the floor be frequently rubbed with a damp cloth or dry rubbed, and when necessary chloride of lime or acetic acid sprinkled from time to time on the floor. Keep within reach of the patient a basin charged with disinfectant for him to spit into; and have close at hand a tub or pail of diluted disinfecting fluid, into which should be immediately thrown any article of clothing removed from the patient. Instead of a pocket handkerchief use small pieces of rag, to be immediately burnt after use. A piece of mackintosh sheeting placed beneath the sheet or blanket of a bed prevents discharge soaking through. A tea-cup full of green copperas solution, 2lbs. to a gallon, put into the night pan before it is used by the patient renders the discharge harmless. Matters discharged from the body should be received in a vessel containing active disinfectants, as about half a pint of either of the following solutions, namely:—Of 2lbs. of sulphate of iron in a gallon of water; one quart of chloride of zinc to three quarts of water; four fluid ounces of carbolic acid (Calvert's No. 5) to a gallon of water. Glasses, cups, and other utensils of the sick room should be cleansed before they are used by other persons. Hang, outside door of room, a sheet or old counterpane, and keep it moistened with some disinfecting solution.

INFECTED CLOTHING AND BEDDING.—Soiled linen, bedding, and such woollen articles as admit of washing, on being removed from the patient should be plunged into boiling water before they are taken from the room, and, in addition, for an hour or two, into a tub of solution of four fluid ounces of carbolic acid (Calvert's No. 5) to a gallon of water; after this they can be boiled and washed. Cloth clothes, mattresses, beds, pillows, &c. (in the absence of a proper public disinfecting establishment, which should be so constructed that its temperature can be well regulated and maintained at from 240 dg. to 250 deg. Fahr. for four or five hours), should be disinfected by smoking with brimstone, exposure in the open air, to the sun, if possible, or if raining in front of a large fire. Washing and lime-whiting of premises should be attended to periodically.

THE PATIENT.—Separate the sick person from the healthy as soon as possible. In cases of scarlet fever, on the seventh and eighth days, anoint the surface of the body twice a day, with camphorated lard or palm oil, or wash with diluted Condy's Liquid. When the patient is sufficiently strong let him take a warm bath, and afterwards be well washed with carbolic acid-soap and water. During a week or ten days from this time he may be kept apart, repeating every two or three days the disinfecting ablutions; after which time he can, with safety, mix again with his family,

Scarlet Fever and Small Pox seldom spread beyond the sick-room when separation and disinfection have been properly used. Whenever children have sore throats or an eruption on the skin, they should be separated from the rest of the family until they have had medical advice or those symptoms have disappeared. Measles and Whooping-cough are contagious, and cases should be more corefully isolated and nursed than is usually done. In the event of death early burial is very desirable. Powdered charcoal, 2 lbs., Cooper's Patent Salts, or good Carbolate Powder, or sawdust nearly saturated with a solution of chloride or sulphate of zinc, placed in the coffin retards decomposition and putrefaction, or takes away offensive smells by absorbing noxious gases.

Nurses and Attendants.—Woollen dresses are to be avoided, and preference given to washing materials. Prevent contact, as much as possible, between attendants and inmates of the house. After handling the sick or things connected with them, let the nurse be careful immediately to wash her hands in diluted Condy's liquid. or with carbolic acid-soap.

Disinfectants.—For *Nuisance Prevention*, as detected by the nose test, those most generally used are Chloride of Lime, Cooper's Salts, Condy's Fluid, Burnett's Liquid, Chloralum, Carbolic Acid, and its compounds. Chloride of Lime and Chlorine require care and experience in management; when used too freely in inhabited rooms, they give rise to irritation of the lungs and air passages. Burnett's Fluid and Carbolic Acid are most efficacious but are poisonous, and the latter possesses a very strong smell, which to many persons is extremely offensive. Ten pounds of sulphate of iron, five gallons of water, and half a pint of common carbolic acid form a good and cheap disinfectant for drain. Iodine, volatilized on a heated surface, is an excellent disinfectant, but is expensive. Carbolic Acid, Chlorozone, or Condy's Liquid improve the air when diffused by means of a large brush, a scent spray, or the hydronette syringe with rose. For *Infection Prevention*,—should be thorough—not diluted, applied in considerable strength; while the room is occupied by the living it is impossible to use volatile or aerial disinfectants in such quantity as to be of real service. When the room is vacated, to disinfect thoroughly, close the windows, stop up the chimney and every aperture and outlet from the room, and use sulphur in the proportion of 1½ oz. for every 100 cubic feet of space. The sulphur may be safely burnt in a shallow pipkin or coarse earthenware saucer containing some live coals or coke; the saucer should be supported on a pair of tongs laid across a pail of water, so that in case of accident the burning sulphur may fall into the water and do no injury. The room should be closed for twelve hours—then the wall papers should be removed, stripped off, and burnt; the walls, ceiling, floor, painted parts of the room and articles of furniture washed with

solution of a carbolic acid, and the ceilings and walls lime-washed, the room should be unoccupied and freely open to the external air for a fortnight, if possible, for plenty of fresh air is the truest, best, and cheapest disinfectant.

Vaccination.—Every child should be vaccinated before the third month; if delayed beyond that period, it may increase the irritation of teething. Skin rashes are often erroneously said to be caused by vaccination. All persons should be re-vaccinated after eight years of age,—and when Small Pox prevails in a family or neighbourhood.

Clergymen, medical practitioners, Scripture readers, and other persons interested in Sanitary reform living in the district, are invited to inform the Medical Officer of Health, and the Sanitary Inspectors, of any nuisances which they discover in their neighbourhood—such communications to be considered strictly confidential. Every ratepayer has a right of complaint, and it is only by such co-operation that Sanitary Officers have a power of remedying nuisances and of checking the ravages of epidemic disease.

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